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EXAMINER	
NGUYEN, LUONG TRUNG	
ART UNIT	PAPER NUMBER
2622	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/727,034	CONLEY, GREGORY J.	
	Examiner	Art Unit	
	LUONG T. NGUYEN	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 25 October 2005.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 4-39 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 4-39 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. The Applicant has attempted to provoke an interference with U.S. Patent No. 6,154,251. However, an interference will not be declared unless those claims are both supported by the Applicant's disclosure and patentable over the prior art. Since claims 4-30 do not meet these requirements (as detailed below), an interference will not be declared at this time.

Response to Arguments

2. Applicant's arguments, see Remarks, filed 10/25/2005, with respect to the rejection(s) of claims 4-11, 17-21 under 35 U.S.C. 112, first paragraph have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ditchburn et al. (US 5,184,732) for claims 17-21, 25.

It is noted that since the Applicant stated that a curvilinear shape is a two-dimensional array as shown in figures 1A, 3A (Remarks, page 15), the Examiner considers that Ditchburn et al. (US 5,184,732) also discloses a two-dimensional array of camera as shown in figure 1.

3. Applicant's arguments filed on 10/25/2005 have been fully considered but they are not persuasive.

In re page 16, Applicant argues that there is no mention of transferring anything from the "viewers" of Ditchburn onto a sequence of frames of a motion picture medium or generating said motion picture medium as claimed in independent claims 12, 22, and 26.

In response, the Examiner considers that Ditchburn et al. does disclose this feature. Ditchburn et al. discloses that the still images captured by viewers 5 are transferred from viewers 5 via channel capture boards 11 onto a sequence of frames in the motion picture medium by the scanner 13 (Figure 2, Column 4, Lines 27-28). Noted that the feature "creating the illusion that a single motion picture camera has moved along said path" is recited as a functional language. Since Ditchburn et al. discloses all the structural limitations of the apparatus claimed in claim 12, Ditchburn et al. meets the claim. See MPEP, section 2114.

In re page 16, Applicant argues that the Patent office has expressly states that Ditchburn "... fails to specifically disclose each camera from said array of cameras records said still image on photographic film..." Therefore, Ditchburn does not disclose all the elements of claims 12, 22, and 26 and their dependent claims 14-15, 24, and 28-29.

In response, it is noted that claims 12, 22 and 26 did not recite the feature "each camera from said array of cameras records said still image on photographic film." Instead, claims 13, 27 recited this feature.

In re page 16, Applicant argues that there is no mention of selecting video from the viewers of Ditchburn that relates to two different time periods.

In response, regarding claim 31, the Applicant recited the limitation "select a first portion of video from the first camera ending at a first time; select a second portion of video from the second video camera beginning at a second time." The Examiner considers that Ditchburn et al. does disclose these features. Ditchburn et al. discloses computer 12 receives video from the first

viewer 5 at a first time via scanner 13 (Figure 2, Column 4, Lines 27-30), which reads on "select a first portion of video from the first camera ending at a first time"; and computer 12 receives video from the last viewer 5 at a second time via scanner 13 (Figure 2, Column 4, Lines 27-30), which reads on "select a second portion of video from the second video camera beginning at a second time."

In re page 16, Applicant argues Ditchburn fails to disclose that the images of the viewer can be taken sequentially.

In response, it is noted that claim 31 does not recite this feature.

In re page 17, Applicant argues that there is an insufficient motivation to combine Collender with Ditchburn.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ditchburn et al. fails to specifically disclose each camera from said array of cameras records said still image on photographic film. However, Collender teaches images captured by cameras 1 through n are recorded on film (Figure 1, Column 3, Lines 43-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify the device in Ditchburn et al. by the teaching of Collender in order to store the captured images on photographic film. This allows the recording an image at a high resolution and produces a standard television signal from photographic film, in which the signal is free from visible flicker.

In re page 19, Applicant argues that Ditchburrn is non-analogous art.

In response to applicant's argument that Ditchburn is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Ditchburn et al. discloses an apparatus comprises plurality of cameras for taking images, therefore, the examiner considers that Ditchburn et al. is in the same field of applicant's endeavor, which also relates to an apparatus comprises plurality of cameras for taking images. Therefore, the examiner considers that Ditchburrn is analogous art.

In re pages 20-21, Applicant argues that there is no motivation to combine Ditchburn with Wilkinson.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5

USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ditchburn et al. fails to specifically disclose wherein the first and second times differ by a time period and the select images from the plurality of intermediate cameras correspond to different times throughout the time period to create an illusion that time has slowed during the illusion of the single camera moving from the first position to the second position. However, Wilkinson et al. a television system, which includes plurality of video cameras, the cameras are sequentially triggered by a sequential switch 40 (Figures 1-3, Column 3, Lines 50-59, Column 4, Lines 44-55, Column 5, Line 28 through Column 6, Line 57). This shows that the first time and second times differ by a time period. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ditchburn et al. by the teaching of Wilkinson et al. in order to provide a system which forms images at a greater speed than that presently possible from a single camera and permits the forming of images virtually one right after the other (Column 3, Lines 22-28).

Specification

4. The amendment filed 10/25/2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amendment, which filed on 10/25/2005, adds news drawings "FIG. 1C, and FIGS. 8-13", which were not filed in the original parent application 08/251,398 and 08/598,158.

Applicant is required to cancel the new matter in the reply to this Office Action.

It should be noted that new drawings "FIG. 1C and FIGS. 8-13" the amendment of specification on pages 4-5 of the amendment filed on 10/25/2005 will not be entered.

Further, it should be noted that since the application introduces new matter (new Figs. 1C and 8-13), it should be filed as a Continuation-In-Part of the parent application 08/598,158; and the application should describe in detail new Figs. 1C, 8-13.

Claim Objections

5. Claims 4-11 are objected to because of the following informalities:

Claim 4 (line 7), claim 8 (line 7), "said still images" should be changed to --still images--.

Claims 5-7 are objected as being dependent on claim 4.

Claims 9-11 are objected as being dependent on claim 8.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 4-6, 8-10, 12, 14-15, 17, 19-20, 22, 24-26, 28-29, 31-32, 34-35, 37-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ditchburn et al. (U.S. 5184,732).

Regarding claim 4, Ditchburn et al. discloses a system for producing virtual camera motion in a motion picture medium comprising an array of cameras (electronic viewers 5, Figure

1, Column 3, Lines 37-40) deployed along a preselected path with each camera focused on a common scene (a viewing zone, Figure 1, Column 3, Lines 37-40); means for triggering (light curtain 3 triggers a strobe for signaling the electronic viewers 5 simultaneously capture the objects, Figure 1, Column 3, Lines 27-36) each of said cameras to substantially simultaneously record a still image of said scene; means for transferring said still images from said cameras into a digital format (computer 12, Figure 2, Column 4, Lines 26-30); means for transferring said digital data into a time-sequence of frames and means for outputting said time-sequence of frames in a motion picture medium (the sequence of frames in the motion picture medium takes place during the scanning (by scanner 13) of the images of the object taken by electronic viewers 5 (Figure 2, Column 4, Lines 27-28).

The feature "creating the illusion that a single motion picture camera has moved along said path" is recited as a functional language. Since Ditchburn et al. discloses all the structural limitations of the apparatus claimed in claim 12, Ditchburn et al. meets the claim. See MPEP, section 2114.

Regarding claim 5, Ditchburn et al. discloses said camera comprises a video camera (electronic viewers 5, Figures 1-2, Column 3, Lines 37-40, Column 4, Lines 12-15) that electronically records said still image as a video frame.

Regarding claim 6, Ditchburn et al. discloses said motion picture medium comprises video storage means (memory 16, Figure 2, Column 4, Line 30).

As for claims 8-10, claims 8-10 are method claims of apparatus claims 4-6; therefore, claims 8-10 are rejected fro the reasons given in claims 4-6, respectively.

Regarding claim 12, Ditchburn et al. discloses a system for producing virtual camera motion in a motion picture medium comprising an array of cameras (electronic viewers 5, Figure 1, Column 3, Lines 37-40) deployed along a preselected path with each camera focused on a common scene (a viewing zone, Figure 1, Column 3, Lines 37-40); means for triggering (light curtain 3 triggers a strobe for signaling the electronic viewers 5 simultaneously capture the objects, Figure 1, Column 3, Lines 27-36) each of said cameras to simultaneously record a still image of said scene; and means for transferring said still images from said cameras in a preselected order along said path onto a sequence of frames in said motion picture medium (the sequence of frames in the motion picture medium takes place during the scanning (by scanner 13) of the images of the object taken by electronic viewers 5 (Figure 2, Column 4, Lines 27-28). The feature "creating the illusion that a single motion picture camera has moved along said path" is recited as a functional language. Since Ditchburn et al. discloses all the structural limitations of the apparatus claimed in claim 12, Ditchburn et al. meets the claim. See MPEP, section 2114.

Regarding claims 14, 19, 28, Ditchburn et al. discloses each camera from said array of cameras comprises a video camera (electronic viewers 5, Figures 1-2, Column 3, Lines 37-40, Column 4, Lines 12-15) that electronically records said still image as a video frame.

Regarding claims 15, 20, 24, 29, Ditchburn et al. discloses motion picture medium comprises video storage means (memory 16, Figure 2, Column 4, Line 30).

Regarding claim 17, Ditchburn et al. discloses a system for producing virtual camera motion in a motion picture medium comprising a two-dimensional array of cameras (electronic viewers 5, Figure 1, Column 3, Lines 37-40) focused on a common scene (a viewing zone, Figure 1, Column 3, Lines 37-40); means for triggering (light curtain 3 triggers a strobe for signaling the electronic viewers 5 simultaneously capture the objects, Figure 1, Column 3, Lines 27-36) each of said cameras to simultaneously capture a time sequence of still images of said scene in plurality of video cameras; means for transferring said still images from a selected sequence of said cameras in a selected path in said two-dimensional array to produce a sequence of frames in said motion picture medium (the sequence of frames in the motion picture medium takes place during the scanning (by scanner 13) of the images of the object taken by electronic viewers 5 (Figure 2, Column 4, Lines 27-28).

The feature "creating the illusion that a single camera has moved along the path of said array of video cameras" is recited as a functional language. Since Ditchburn et al. discloses all the structural limitations of the apparatus claimed in claim 22, Ditchburn et al. meets the claims. See MPEP, section 2114.

Regarding claim 22, Ditchburn et al. discloses a system for producing virtual camera motion in a motion picture medium comprising an array of cameras (electronic viewers 5, Figure 1, Column 3, Lines 37-40) focused on a common scene (a viewing zone, Figure 1, Column 3,

Lines 37-40); means for triggering (light curtain 3 triggers a strobe for signaling the electronic viewers 5 simultaneously capture the objects, Figure 1, Column 3, Lines 27-36) each of said cameras to simultaneously capture a time sequence of still images of said scene in plurality of video cameras; a processor (computer 12, Figure 2, Column 4, Lines 27-28) receiving said video frames from said video cameras and generating said motion picture medium containing said still images from a series of said video frames (the motion picture medium containing the still images takes place during the scanning (by scanner 13) of the images of the object taken by electronic viewers 5 (Figure 2, Column 4, Lines 27-28).

The feature "creating the illusion that a single camera has moved along the path of said array of video cameras" is recited as a functional language. Since Ditchburn et al. discloses all the structural limitations of the apparatus claimed in claim 22, Ditchburn et al. meets the claims. See MPEP, section 2114.

Regarding claim 25, Ditchburn et al. discloses said array of video cameras is two dimensional (Figure 1, two dimensional array of viewers 5).

Regarding claim 26, claim 26 is a method claim of apparatus claim 12. Therefore, claim 26 is rejected for the reason given in claim 12, except the feature "creating the illusion that a single motion picture camera has moved along said path," which is recited as a functional language, is inherently disclosed in Ditchburn et al. The act of simultaneously taking a picture with multiple cameras and outputting the pictures sequentially inherently achieves this effect.

Regarding claim 31, Ditchburn et al. discloses a system for creating virtual camera motion comprising:

a) an array of video cameras (electronic viewers 5, Figure 1, Column 3, Lines 37-40) deployed along a path with each video camera focused on a common scene (a viewing zone, Figure 1, Column 3, Lines 37-40), the array comprising a plurality intermediate video cameras between a first video camera (the first viewer 5 on the upper side of the path with nine viewers 5, Figure 2) and a second video camera along the path (the last viewer 5 on the lower side of the path with nine viewers, Figures 1-2, Column 3, Lines 37-40);

b) a control system (computer 12, Figure 2, Column 4, Lines 27-30) associated with the array of video cameras and adapted to:

i) receive video from at least the first and second video cameras (computer 12 receives video from viewers 5, Figure 2, Column 4, Lines 27-30);

ii) select a first portion of video from the first camera ending at a first time (computer 12 receives video from the first viewer 5 at a first time via scanner 13, Figure 2, Column 4, Lines 27-30);

iii) select a second portion of video from the second video camera beginning at a second time (computer 12 receives video from the last viewer 5 at a second time via scanner 13, Figure 2, Column 4, Lines 27-30);

iv) select images from the plurality intermediate cameras corresponding to a time equal to or between the first and second times (computer 12 receives video from intermediate viewer 5 between the first viewer 5 and the last viewer 5 via scanner 13, Figure 2, Column 4, Lines 27-30);

v) create a resultant video providing a video sequence of the first portion of video, a sequence of the images from the plurality of intermediate cameras, and the second portion of video (a video sequence of the first portion of video and the second of video takes place during the sequential of the scanning of the images captures by viewers 5, Figure 2, Column 4, Lines 27-30).

The feature "creating an illusion of that a single camera remained still during the first portion of video at a position of the first video camera and moved along the path to a position of the second video camera for the second portion of video" is recited as a functional language. Since Ditchburn et al. discloses all the structural limitations of the apparatus claimed in claim 31, Ditchburn et al. meets the claim. See MPEP, section 2114.

As for claim 34, all the limitations are contained in claim 31, therefore, claim 34 is rejected for the reason given in claim 31.

Regarding claim 37, claim 37 is a method claim of apparatus claim 34. Therefore, claim 37 is rejected for the reason given in claim 34, except the feature "creating an illusion of that a single camera remained still during the first portion of video at a position of the first video camera and moved along the path to a position of the second video camera for the second portion of video" which is recited as a functional language, is inherently disclosed in Ditchburn et al.

Regarding claims 32, 35, 38, Ditchburn et al. discloses wherein the first and second times are equal and the select images from the plurality of intermediate cameras correspond to the first

and second times to create an illusion that time has stopped during the illusion of the single camera moving from the first position to the second position (Ditchburn et al. all the viewers 5 are trigger simultaneously (Figure 1, Column 3, Lines 25-30), therefore, the first time at which the portion of video from the first viewer 5 (on upper part, Figure 2) and the second time at which the portion of video from second viewer 5 (on lower part, Figure 2) are equal.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 7, 11, 13, 16, 18, 21, 23, 27, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ditchburn et al. (U.S. 5,184,732) in view of Collender (U.S. 3,815,979).

Regarding claims 13, 18, 27, Ditchburn et al. fails to specifically disclose each camera from said array of cameras records said still image on photographic film. However, Collender teaches images captured by cameras 1 through n are recorded on film (Figure 1, Column 3, Lines 43-51). Therefor, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ditchburn et al. by the teaching of Collender in order to store the captured images on photographic film. This allows the recording an image at a high resolution and produces a standard television signal from photographic film, in which the signal is free from visible flicker.

Regarding claims 7, 11, 16, 21, 23, 30, Ditchburn et al. fails to specifically disclose said motion picture medium comprises motion picture film. However, Collender teaches pictures may be recorded on ordinary motion picture film (Figure 1, Column 6, Lines 58-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ditchburn et al. by the teaching of Collender in order to store the captured images on photographic film. This allows the recording an image at a high resolution and produces a standard television signal from photographic film, in which the signal is free from visible flicker.

10. Claims 33, 36, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ditchburn et al. (U.S. 5,184,732) in view of Wilkinson et al. (U.S. 4,453,182).

Regarding claims 33, 36, 39, Ditchburn et al. fails to specifically disclose wherein the first and second times differ by a time period and the select images from the plurality of intermediate cameras correspond to different times throughout the time period to create an illusion that time has slowed during the illusion of the single camera moving from the first position to the second position. However, Wilkinson et al. a television system, which includes plurality of video cameras, the cameras are sequentially triggered by a sequential switch 40 (Figures 1-3, Column 3, Lines 50-59, Column 4, Lines 44-55, Column 5, Line 28 through Column 6, Line 57). This shows that the first time and second times differ by a time period. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device in Ditchburn et al. by the teaching of Wilkinson et al. in order to provide a system which forms images at a greater speed than that presently possible from a

single camera and permits the forming of images virtually one right after the other (Column 3, Lines 22-28).

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571) 272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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04/06/06

DAVID OMETZ
SUPERVISORY PATENT EXAMINER